

Title (en)

Method for determining the load in the drum of a laundry treatment machine

Title (de)

Verfahren zum Bestimmen der Beladung der Trommel einer Wäschebehandlungsmaschine

Title (fr)

Procédé pour détermination de la charge dans le tambour d'une machine de traitement du linge

Publication

EP 1447469 A3 20060517 (DE)

Application

EP 04002620 A 20040206

Priority

DE 10305675 A 20030212

Abstract (en)

[origin: US2004154350A1] In order to be able to implement higher rotary spin speeds without structurally endangering the machine, a characteristic value that is as accurate as possible for the currently prevailing drum loading is desirable, for loading-dependent rotary speed limitation. Acceleration to a spin speed is interrupted in order to measure the respective electrical power consumption of the drive motor for a given rotary speed and then for a lower rotary speed that does not lead to the further removal of water from the laundry in the drum. Then the energy requirement and the acceleration period back up to the given rotary speed are measured, before the drum is accelerated to spin speed. The latter is to be limited in load-dependent manner, namely in accordance with the instantaneous mass moment of inertia of the drum, which is proportional to the acceleration energy less the frictional energy during the acceleration phase, formed from the average value of the two friction powers measured at constant rotary speeds and the acceleration period.

IPC 8 full level

D06F 39/00 (2006.01); **D06F 33/02** (2006.01); **D06F 35/00** (2006.01); **D06F 37/20** (2006.01)

CPC (source: EP US)

D06F 34/18 (2020.02 - EP US); **D06F 2103/38** (2020.02 - EP US); **D06F 2103/48** (2020.02 - EP US)

Citation (search report)

- [AD] DE 4431846 A1 19960314 - AKO WERKE GMBH & CO [DE]
- [A] EP 1067233 A2 20010110 - DIEHL AKO STIFTUNG GMBH & CO [DE]
- [A] US 5507054 A 19960416 - BLAUERT PETER [DE], et al
- [A] GB 2322141 A 19980819 - TOSHIBA KK [JP]

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DE102015109032B4; CN107385773A; CN110067109A; DE102015109032A1; EP2107151A1; US8336378B2; EP2597186A1; WO2009121524A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2004154350 A1 20040812; US 7162759 B2 20070116; AT E427376 T1 20090415; DE 10305675 B3 20040527;
DE 502004009252 D1 20090514; EP 1447469 A2 20040818; EP 1447469 A3 20060517; EP 1447469 B1 20090401; ES 2321396 T3 20090605

DOCDB simple family (application)

US 69536903 A 20031028; AT 04002620 T 20040206; DE 10305675 A 20030212; DE 502004009252 T 20040206; EP 04002620 A 20040206;
ES 04002620 T 20040206